# U.S. Smaller Companies

QUARTERLY STRATEGY UPDATE

### Fourth Quarter 2018

CHRISTOPHER A. BERRIER



#### **COMPOSITE PERFORMANCE(%)**

	COMPOSITE GROSS OF FEES	COMPOSITE NET OF FEES	RUSSELL 2000® GROWTH INDEX
3 MOS.	-18.35	-18.49	-21.65
1YR.	-3.29	-3.95	-9.31
3 YR.	8.58	7.86	7.24
5 YR.	7.17	6.47	5.13
10 YR.	15.71	14.94	13.52

The composite performance shown above reflects the Brown Advisory Small-Cap Growth Composite, managed by Brown Advisory Institutional. Brown Advisory institutional is a division of Brown Advisory LLC, and Brown Advisory Institutional is a GIPS compliant firm. Please see the end of this for a GIPS compliant presentation.

#### **REP. ACCOUNT CHARACTERISTICS**

	U.S. SMALLER COMPANIES REP. ACCT.	RUSSELL 2000 <sup>®</sup> GROWTH INDEX INDEX
P/E Ratio (FY2 Est.)	20.3x	16.0x
Earnings Growth (3-5 Yr. Est.)	18.6%	17.5%
Wtd. Avg. Market Cap.	\$4.7B	\$2.2B
Weighted Median Market Cap.	\$4.0B	\$2.0B
Portfolio Turnover (3 YR Avg.)	37.3%	

#### REP. ACCOUNT TOP 10 PORTFOLIO HOLDINGS

SECURITY	% PORTFOLIC
Waste Connections Inc	5.0
Cash & Equivalents	4.2
Bright Horizons Family Solution, Inc.	4.2
Genpact Ltd.	3.1
Charles River Laboratories International, Inc.	3.0
Mimecast, Ltd.	3.0
Catalent, Inc.	2.9
Choice Hotels International, Inc.	2.2
Evo Payments, Inc. Cl A	2.1
GCI Liberty, Inc. CI A	2.0
TOTAL	31.7

### **Review & Outlook**

Portfolio Manager

### **GEORGE SAKELLARIS, CFA** Associate Portfolio Manager

Our strategy strives to produce attractive risk-adjusted returns over a full market cycle through long-term security selection. Stock-specific performance drives our ability to keep pace in "risk-on" markets, while portfolio diversification, asset quality and valuation sensitivity have helped to produce solid downside capture over time. Put more simply, we try to take risks when we are getting paid to do so and to avoid them when we are not. We want to think like owners of a business vs. renters of stock, but acknowledge that when our thesis is violated, it is usually time to part ways with a holding. We believe that this approach, which has been in place since the second quarter of 2006, is an effective one for driving sound long-term results.

Looking back at 2018, the first eight months were not materially different than the ultra-low-volatility, multiple-expanding, momentum-based 2017 rally. The portfolio fared pretty well in the first 2/3 of the year as stock picking drove gains modesdy ahead of our primary benchmark, the Russell 2000° Growth Index, in a market environment that was somewhat unfriendly to our approach. Then, things changed dramatically. Risk-on turned to risk-off suddenly (as it usually does) and the portfolio's downside capture allowed it to pull meaningfully ahead of the Index by the end of the year.

Masked under these positive numbers, however, is a tinge of disappointment. While we believe that we were positioned well for the end of astronomically high valuations and a return of volatility-which we have discussed at length in these pages-we initiated several select "defensive" positions that failed to act according to plan. In each of these positions, a handful of relatively small negative events combined to produce poor quarters that were reported during a very bad period for reporting poor quarters! Once again, we are reminded of the sage words of our favorite philosopher, Mike Tyson, "…everyone has a plan until they are punched in the face…"

In sum, despite taking it on the chin unexpectedly one or two times in the fourth quarter, it was a solid year. Most importantly, our results came via stock selection that was balanced across sectors and which represents the byproduct of measurable team productivity improvement. In the year, we interviewed more companies, which increased our new idea pipeline, which increased our "on deck" circle, which in turn led to more actionable investments, which we believe helped improve results.

At times, we are considering numerous new investments for inclusion into the portfolio. When one company appears vastly superior in its risk/reward dynamics and/or has characteristics that we believe make it a highly probable long-term compounder, our decision process is quite easy. However, there are times when several businesses appear roughly equivalent in their attributes. What then? It is at this point that we look critically at the portfolio to determine where we have potential over- or under-exposures to various market sub-sector or factors. It is at this point where we also think about the overall investment landscape in the hope of tilting the investment odds in our favor with each incremental decision. Here is what we see today:

For much of the past year, the market remained in a state of relatively low volatility and high valuation. The downdraft and violent price movements of the fourth quarter took us from extreme levels to somewhere closer to normal. For the entire year, small-cap volatility was about average. Absolute valuations moved from the 99th percentile to something simply above average. Investors started to contemplate risks, not just potential gains.

We believe that volatility is the enemy of the short-term investor and the friend of the long-term investor. Given recent price movements, portfolio activity has been higher than average as we shift the portfolio in light of a changing opportunity set. We feel as though we enter 2019 with a constructive balance of legacy and new holdings, offense and defense, and growth at reasonable values.

In deploying capital, we are cognizant of the following potential risks. Leverage across the small-cap space remains quite elevated and close to historical highs. Thus, we have been paring back or capping the weighting of more highly levered businesses. Portfolio leverage remains quite low on an absolute and relative basis, but we will remain cautious, particularly when high yield spreads remain relatively tight given recent market and economic concerns. Valuation and quality also did not help much in protecting capital in 2018, but we believe that if recent volatility continues, these two attributes will be beneficial and we are acting accordingly.

Finally, in a market where cyclical sectors were hit tremendously hard, Information technology had a banner year, producing positive returns in the growth space. We believe that this is due to investors largely being more concerned to date about U.S.-China trade relations than true economic weakness. However, recent economic data coming out of China, Europe and the U.S. bears monitoring as investors may start to look not only at tech's secular growth attributes, but its cyclicality as well.

The last risk worth noting is the rise of the machines. Clearly, trading in the U.S. market is more influenced than ever by index funds, ETFs and algorithms than at any period in our lives. We likely saw some influence of fund flows moving out of ETFs and automated derisking in the fourth quarter, but for the full year of 2018, small-cap ETF fund flows were demonstrably positive. Individual stock dislocations, particularly in less liquid names, is certainly very possible should fund flows actually turn negative in 2019. With all of the above, it is impossible to predict, but we will do our best to prepare.

Last year, we started a segment of this annual report to review companies that are emblematic of our process, yet lie outside the top contributors/detractors for the year. Our goal is to provide our clients with a better sense of how we think and reinforce our discipline of spending as much time on the companies outside of the highlights as those in them.

Zuora Inc. provides subscription businesses with a cloud platform for pricing, quoting, ordering, billing, payment and renewal tools. Fundamentally, it is a way to play a dramatic shift in consumption patterns to a pay-as-you-go model (e.g. Netflix). Furthermore, it is a potentially important piece in another secular shift, the digital transformation of the chief financial officer suite. Similar to salesforce automation (Salesforce.com) and marketing automation (Adobe), we believe that financial functions will evolve out of Excel and email to a more streamlined workflow.

We first encountered Zuora in 2014 when the company was private and identified it as an important player in the trends described above. In 2018, we had an opportunity to sit with them during their IPO roadshow. After a number of customer conversations as part of our due diligence process, it was clear that they possessed a strong value proposition for their software. We saw a long runway for customer growth in both its legacy base of software companies, as well as more traditional sectors such as media and entertainment. In addition to a sizeable addressable market opportunity, it was also apparent that there were multiple ways to expand with existing customers: customers: customers growth in transaction volume and upsell/cross-sell of an expanding product portfolio.

Despite our favorable view of the company's long-term growth prospects, we spent a considerable amount of time debating valuation due to the likelihood that their business may not generate earnings for two to three years. Using long-term cash flow generation potential and absolute/relative recurring revenue multiples, we determined that a price range in the mid-teens was a fair price to pay given positive fundamentals.

(Continued on following page)

The IPO priced at \$14 per share and we participated in the deal. However, due to a relatively small deal size and the marked's strong demand for software-as-a-service companies at the time, we were not able to achieve our targeted position size. Shortly after the IPO, the stock ran to what we felt was an unsustainable level. For perspective, our "purchase price" implied a 2019 enterprise value-to-sales multiple in the mid- to high-single digits. At its peak of roughly \$35, the stock traded at nearly 20x revenue. Given our risk/reward focus, we resigned ourselves to holding only a relatively de minimis position for well over six months given the post-IPO price action. While we certainly did not know that the company would once again move back into our targeted range, we did feel that the probability was high enough to wait.

Zuora is an example of one of many businesses where we used the recent bout of market volatility to increase our position as the stock moved back into the \$15-\$20 "purchase price" range. Importantly, revenue estimates during our waiting period increased meaningfully. Today, the position size is in the range of 0.75-1.00%, which was our original target, and reflects the multi-year period before the company achieves non-GAAP profitability. We hope that Zuora is a business that will be in the portfolio for many years, representing our constant attempt to recycle capital from later-stage businesses into earlier-stage business to drive a healthy balance of both offensive and defensive positions in the portfolio.

Equity markets have re-based. There is now a greater appreciation of risk as FOMO (fear of missing out) has been replaced with a more cautious approach. If the economic environment slows benignly and the Federal Reserve leans dovish, we believe that the conditions for positive equity returns exist for 2019. However, the markets are not yet pricing in a more material U.S. economic slowdown. All one has to do is look broadly across earnings estimates to see that a down cycle is not yet built into stock prices. Last year, the U.S. market tumbled to a position more in line with global markets. The key today is whether our economy does the same in 2019.

While we certainly bought risk selectively in the fourth quarter of 2018 (e.g. Chegg, 2U, Inc., Make My Trip) and it appears to already be showing up in the portfolio's upside capture, we remain focused on relative downside protection against illiquidity, leverage, and unappreciated cyclicality. As we enter 2019, our industrial and information technology weights are down and we are selectively adding to consumer discretionary/staples and healthcare as valuations have compressed.

The strategy posted a solid calendar year on a relative basis, but as large shareholders ourselves, we would have certainly desired to post positive returns versus mildly negative ones. As we look ahead, we know that people and process drive long-term outcomes. In this regard, we are pleased to report that our team has never been stronger, our process more sound, or our productivity higher. We see 2018 as a banner year for company interviews, pipeline building and new investment activity. These are the leading indicators that we monitor to determine whether our probability of outperforming is improving or not. Overall, we believe that we are in good form and I would like to thank the team for their dedication and hard work.

We remain focused on generating attractive risk-adjusted returns over a full market cycle. In order to do so, we need a strong team and process, but we also need patient, thoughtful and well-informed investors to enable us to continue to take a long-term, high active share approach. Our philosophy is built on harnessing the power of compounding, driving returns through stock selection and mitigating downside risk through diversification, quality and valuation sensitivity. We look forward to the year ahead and to updating you on our progress. We greatly appreciate your support and interest in the strategy. *Please et in touch for an extended version of this commentary.* 

### Sector Diversification

- Consumer discretionary increased in weight, although the majority of the allocation resides outside the traditional retail, apparel and restaurant landscape.
- Consumer staples has been an actively traded area of late, however the overall weight has not changed meaningfully.
- Financial services is a modest overweight when compared to the benchmark, although one that has been in decline.
- Health care remains our largest underweight as valuations over the past 12 months have been exceptionally high.
- Energy, producer durables, and materials & processing are viewed as a cyclical "basket". We tend to find more businesses that fit our investment criteria in producer durables than in the other areas, but the net result is a "basket" weight below the benchmark.
- Technology is typically an inline to overweight portfolio position, although well extended valuations of late have caused this trend to deviate from the norm with a modest underweight.
- Utilities is represented by a singular holding.

RUSSELL GLOBAL SECTORS	U.S. SMALLER COMAPNIES REP. ACCOUNT (%)	RUSSELL 2000 <sup>®</sup> GROWTH INDEX (%)	DIFFERENCE (%)		R COMAPNIES OUNT (%)
	Q4'18	Q4'18	Q4'18	Q3'18	Q4'17
Consumer Discretionary	22.39	18.09	4.30	16.91	13.12
Consumer Staples	3.40	2.70	0.69	3.91	3.11
Energy	0.82	1.72	-0.90	0.74	0.00
Financial Services	11.64	10.76	0.88	13.19	13.63
Health Care	15.26	25.86	-10.60	14.97	17.05
Materials & Processing	1.57	6.95	-5.38	2.10	2.27
Producer Durables	19.99	15.43	4.56	23.36	19.36
Technology	16.01	16.62	-0.61	16.47	21.65
Utilities	1.78	1.87	-0.09	2.94	2.31
Unassigned	7.15		7.15	5.41	7.50

### Quarterly Attribution Detail by Sector

Consumer discretionary, energy and materials & processing were all meaningfully positive contributors during the period. In consumer discretionary, our underweight to more momentum-oriented benchmark names aided results. Our largely debt-free energy holding held up better than the sector. And, our aerospace exposure in materials & processing, being less cyclical, declined less than the overall sector.

Sectors producing a negative contribution were producer durables, technology and utilities, although the impact in each was minor.

The attribution analysis of the unassigned category has a profound impact on total results, however it is important to note that portfolio holdings in the area were down well less than half the benchmark in the period and the benchmark only had a 0.03% weight allocated to the positively returning category.

RUSSELL GLOBAL SECTORS		U.S. SMALLER COMPANIES REP. ACCOUNT		RUSSELL 2000 <sup>®</sup> GROWTH INDEX		ATTRIBUTION ANALYSIS		
	AVERAGE WEIGHT (%)	RETURN (%)	AVERAGE WEIGHT (%)	RETURN (%)	ALLOCATION EFFECT (%)	SELECTION AND INTERACTION EFFECT (%)	TOTAL EFFECT (%)	
Consumer Discretionary	20.03	-16.67	18.02	-19.97	0.02	0.65	0.66	
Consumer Staples	3.77	-12.43	2.67	-13.20	0.13	-0.02	0.11	
Energy	0.76	-28.40	2.09	-40.58	0.32	0.13	0.45	
Financial Services	12.18	-17.40	10.60	-16.47	0.13	-0.11	0.02	
Health Care	15.79	-26.17	26.01	-25.58	0.46	-0.24	0.21	
Materials & Processing	1.62	-14.27	7.09	-25.58	0.26	0.19	0.45	
Producer Durables	21.87	-21.29	15.57	-21.03	0.05	-0.12	-0.08	
Technology	15.24	-20.35	15.53	-19.37	-0.03	-0.09	-0.11	
Utilities	2.10	-18.05	1.82	-15.24	0.01	-0.06	-0.05	
Unassigned	6.64	-9.45	0.60	4.37	1.80	-1.19	0.61	
Total	100.00	-19.38	100.00	-21.65	3.13	-0.86	2.27	

Please see disclosure statements at the end of this presentation for additional information and for a complete list of terms and definitions.

## **Quarterly Contribution to Return**

- Chegg reported strong subscriber growth in the quarter and solid 2019 guidance. The company is also releasing a new bundling offering in 2019 that should increase average revenue-per-user and reduce subscriber churn.
- Biohaven Pharmaceuticals primarily focuses on developing therapies for neurological diseases that have a large market opportunity. Its lead drug, Rimegepant, is designed for patients who suffer from acute migraines and has the potential to treat patients who suffer from chronic migraines as well. In the fourth quarter, Biohaven released a long-term safety study and an orally dissolvable study that were both consistent with prior efficacy and showed a more favorable safety profile, which led to its outperformance. Rimegepant remains on track to receive an FDA approval in late 2019.
- EVO Payments outperformed the broader index in the fourth quarter following a strong quarterly earnings release, which showed robust growth in both the North American and European markets. Additionally, management issued revised guidance that called for an acceleration in currency-neutral revenue growth relative to their prior guide.
- The announcement of a favorable acquisition and a concurrent positive pre-announcing of 4Q18 results led Zynga to outperform.
- Global Blood Therapeutics primarily focuses on developing therapies for patients with rare hematology diseases that have a large unmet need. Its lead drug, Voxelotor, is designed for patients who suffer from sickle cell disease and has demonstrated a clinical benefit thus far. In the fourth quarter, they released full data from their latest PIII trial and showed that Voxelotor decreases the risk of stroke and mortality to the patient, which led to its outperformance.
- Catalent reported disappointing quarterly results where topline growth was pressured by the persistent global shortage of ingredients for ibuprofen, coupled with a decision by a customer to move its product's manufacturing in-house. Despite these pressures, management reiterated its 2019 revenue and profitability guidance. The counterbalance to these headwinds was the launch of new products that contributed ~\$50M to the quarter and the likely abatement of the ibuprofen issue in the second half of 2019.
- Welbilt was likely our most disappointing stock of 2018. While North American revenue growth was solid and consistent with our due diligence, the company's margins were negatively impacted by a collection of surprising issues. This result ran counter to the last several quarters, which were highlighted by inconsistent revenue growth, but strong margins. Shares felt additional pressure due to a recent management change and tariff fears.
- We bought BWX Technologies for its relatively low cyclicality and strong long-term visibility. Despite an elevated valuation, we thought the stock would act more defensively (as it is a defense company) and thus it ranked as disappointing stock #1B last year. Simply put, two non-core and relatively minor business segments produced a large decline in the stock as management failed to execute on the positive vision they had previously touted. A meaningful portion of the downdraft relates to management credibility issues.

### Portfolio Activity

- Appfolio sells software and services to real estate property managers. We like the company's attractive growth profile driven by adding additional customers and importantly their ability to increase monetization from its existing customers through offering services where others (tenants, for example) bear the cost.
- Biohaven Pharmaceuticals primarily focuses on developing therapies for neurological diseases that have a large market opportunity. Its lead drug, Rimegepant, is designed for patients who suffer from acute migraines and also has the potential to treat patients who suffer from chronic migraines. Thus far, the efficacy data and safety profile appear to make Rimegepant best-in-class as a small molecule therapy and remains on track to receive an FDA approval in late 2019.
- Chegg is an online learning platform that rents, sells and buys textbooks and provides study aids for high school and college students. The company offers a number of products including online tutoring and step-by-step textbook solutions.
- We believe that Hain Celestial Group has a valuable portfolio of brands that can return to growth as a standalone company or as part of a larger food company. The turnaround plan underway now for two years is highly credible in our view and just now on the cusp of delivering the financial flexibility that the company needs to rebuild momentum. The CEO transition and persistently negative U.S. sales growth over recent months have resulted in a lack of earnings visibility and a severe stock drawdown. With the stock down over 70% from its highs and the turnaround on the cusp of gaining traction. The company's earnings report and analyst day in early February, along with the expected sale of Pure Protein, may be catalysts to reverse the earnings decline and highlight the value of the business.
- Integra LifeSciences is a diversified global medical device company that we have tracked for several years. Following the acquisition and successful integration of Codman Surgical, the company has the largest neurosurgery offering in the world. We believe that a tenured and capable management team can execute on its articulated long-range plan of 5-7% organic revenue growth and 200-500 bps of EBITDA margin expansion. In addition to new product introductions, Integra is poised to take advantage of competitive disruptions in the wound care market, as well as a more rationalized, higher-margin product suite.
- Zynga is a leading mobile gaming publisher. We are excited about the company's prospects over the next several years given the stability of their current portfolio, the sizable pipeline of upcoming game launches and their history of prudent capital allocation.
- We sold **Alarm.com** due to valuation and long-term business model concerns.
- We decided to reduce exposure to the email security space, and eliminated Proofpoint due to our preference for Mimecast.
- We maintain a conservative, data-driven approach in the biotechnology space and eliminated Ultagenyx Pharmaceutical to fund other ideas where we carried higher conviction, such as LOXO Oncology and Biohaven.

TOP FIVE CONTRIBUTORS CHGG Chegg, Inc. 0.86 23.62 0.13 Biohaven BHVN Pharmaceutical Holding 0.17 13.23 0.03 Company Ltd. EVO Payments, Inc. EVOP 1.96 3.22 0.03 Class A ZNGA Zynga Inc. Class A 0.56 -5.98 0.02 Global Blood GBT 0.27 8.03 0.01 Therapeutics Inc SMALL-CAP GROWTH REP. ACCOUNT **BOTTOM FIVE CONTRIBUTORS** CTLT Catalent Inc -31.55 -1.16 3.35 WBT Welbilt Inc 2.05 -46.79 -1.14 BWXT -0.82 BWX Technologies, Inc. 184 -38 65 National Vision Holdings, -0.57 FYF 1.39 -37 59 Inc

SMALL-CAP GROWTH REP. ACCOUNT

National Vision Holdings reported strong quarterly results, but high-multiple retail stocks were hit very hard in the broader market selloff. We remain positive about the long-term prospects for the business and have added to our position.

Aspen Technology, Inc.

1.83

-27.86

-0.56

AZPN

Aspen Technology's stock fell in line with the drop in oil prices in the quarter, despite a good earnings report and a positive fundamental outlook.

#### SMALL-CAP GROWTH REP. ACCOUNT PORTFOLIO ACTIVITY

ADDITIONS		SECTOR
APPF	AppFolio Inc Class A	Information Technology
BHVN	Biohaven Pharmaceutical Holding Company Ltd.	Health Care
CHGG	Chegg, Inc.	Consumer Discretionary
HAIN	Hain Celestial Group, Inc.	Consumer Staples
IART	Integra LifeSciences Holdings Corporation	Health Care
ZNGA	Zynga Inc. Class A	Communication Services
DELETIONS		SECTOR
ALRM	Alarm.com Holdings, Inc.	Information Technology
MDSO	Medidata Solutions, Inc.	Health Care
PFPT	Proofpoint, Inc.	Information Technology
RARE	Ultragenyx Pharmaceutical, Inc.	Health Care

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# **GICS Sector Diversification**

GICS SECTOR	U.S. SMALLER COMPANIES REP. ACCOUNT (%)	RUSSELL 2000 <sup>®</sup> GROWTH INDEX (%)	DIFFERENCE (%)	U.S. SMALLER COMPANIES REP. ACCOUNT (%)		
	Q4 '18	Q4 '18	Q4 '18	Q3 '18	Q4 '17	
Communication Services	4.80	3.53	1.27	4.66	7.41	
Consumer Discretionary	19.82	14.76	5.07	15.44	10.61	
Consumer Staples	3.13	3.11	0.01	4.18	2.64	
Energy	0.82	1.72	-0.90	0.74		
Financials	6.35	7.47	-1.11	6.91	6.50	
Health Care	15.26	26.32	-11.06	14.97	14.94	
Industrials	21.05	17.72	3.33	24.31	22.95	
Information Technology	28.77	18.51	10.26	28.79	34.91	
Materials		3.37	-3.37			
Real Estate		2.96	-2.96			
Utilities		0.52	-0.52			

# GICS Quarterly Attribution Detail by Sector

SECTOR	U.S. SMALLER COMPANIES REP. ACCOUNT		RUSSELL 2000 <sup>®</sup>	RUSSELL 2000 <sup>®</sup> GROWTH INDEX		ATTRIBUTION ANALYSIS		
	AVERAGE WEIGHT (%)	RETURN (%)	AVERAGE WEIGHT (%)	RETURN (%)	ALLOCATION EFFECT (%)	SELECTION AND INTERACTION EFFECT (%)	TOTAL EFFECT (%)	
Communication Services	4.61	-16.98	3.53	-18.61	0.03	0.05	0.08	
Consumer Discretionary	17.70	-15.50	14.94	-20.91		1.00	1.00	
Consumer Staples	3.90	-12.42	3.03	-12.51	0.11	-0.04	0.07	
Energy	0.76	-28.40	2.11	-41.35	0.34	0.14	0.48	
Financials	6.84	-16.33	7.53	-19.01	-0.03	0.18	0.14	
Health Care	15.79	-26.17	26.66	-25.05	0.42	-0.34	0.08	
Industrials	22.85	-19.73	18.02	-22.50	-0.04	0.61	0.58	
Information Technology	27.55	-19.31	17.29	-17.91	0.48	-0.41	0.06	
Materials			3.62	-25.46	0.16		0.16	
Real Estate			2.81	-11.48	-0.27		-0.27	
Utilities			0.47	1.76	-0.11		-0.11	
Total	100.00	-19.38	100.00	-21.65	1.08	1.19	2.28	

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### Strategy Composite

Year	Composite TotalGross Returns (%)	Composite TotalNet Returns (%)	BenchmarkReturns(%)	Composite 3-Yr Annualized Standard Deviation (%)	Benchmark 3-Yr AnnualizedStandard Deviation (%)	Portfolios in Composite at EndofYear	Composite Dispersion (%)	Composite Assets (\$USD Millions)	GIPS Firm Assets (\$USDMillions)
2017	18.8	18.1	22.2	12.2	14.6	33	0.2	2,301	33,155
2016	11.4	10.7	11.3	14.0	16.7	30	0.3	1,797	30,417
2015	8.9	8.2	-1.4	13.1	15.0	32	0.4	1,311	43,746
2014	1.4	0.8	5.6	11.8	13.8	32	0.3	1,597	44,772
2013	42.6	41.8	43.3	15.4	17.3	44	0.7	1,830	40,739
2012	16	15.4	14.6	18.3	20.7	32	0.6	1,178	26,794
2011	-1.7	-2.4	-2.9	20.6	24.3	29	0.5	1,023	19,962
2010	30.8	29.8	29.1	27.1	27.7	25	0.1	993	16,859
2009	43.1	41.9	34.5	25.2	24.9	16	1	481	11,058
2008	-38.9	-39.4	-38.5	23.3	21.3	17	0.2	323	8,547
2007	17.2	16.1	7	14	14.2	16	0.5	411	7,385

Brown Advisory Institutional claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Brown Advisory Institutional has been independently verified for the periods from January 1, 1993 through December 31, 2017. The Verification reports are available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation. GIPS® is a registered trademark owned by CFA Institute.

\*For the purpose of complying with the GIPS standards, the firm is defined as Brown Advisory Institutional, the Institutional and Balanced Institutional asset management divisions of Brown Advisory. As of July 1, 2016, the firm 1. was redefined to exclude the Brown Advisory Private Client division, due to an evolution of the three distinct business lines

2. The Small-Cap Growth Equity Composite includes all discretionary portfolios invested in U.S. equities with strong earnings growth characteristics and small market capitalizations. The minimum account market value required for composite inclusion is \$1.5 million.

3 This composite was created in 1997.

4 The benchmark is the Russell 2000® Growth Index. The Russell 2000® Growth Index measures the performance of the small-cap growth segment of the U.S. equity universe. It includes those Russell 2000® Index companies with higher price-to-book ratios and higher forecasted growth values. The Russell 2000® Growth Index is constructed to provide a comprehensive and unbiased barometer for the small-cap growth segment. The Index is completely reconstituted annually to ensure new and growing equities are included and that the represented companies continue to reflect growth characteristics. The Russell 2000® Growth Index and Russell® are trademarks/service marks of the London Stock Exchange Group companies. An investor cannot invest directly into an index. Benchmark returns are not covered by the report of the independent verifier 5

The dispersion of annual returns is measured by the equal weighted standard deviation of portfolio returns.

Gross-of-fees performance returns are presented before management fees but after all trading commissions, and gross of foreign withholding taxes (if applicable). Net-of-fee performance returns reflect the deduction of actual management fees and all trading commissions. Other expenses can reduce returns to investors. The standard management fee schedule is as follows: The standard management fee schedule is as follows: 6. first \$25 million; 0.90% on the next \$25 million; 0.80% on the next \$50 million; and 0.70% on the balance over \$100 million. Further information regarding investment advisory fees is described in Part II A of the firm's form ADV. Actual fees paid by accounts in the composite may differ from the current fee schedule.

The three-year annualized ex-post standard deviation measures the variability of the composite (using gross returns) and the benchmark for the 36-month period ended on December 31.

8 Valuations and performance returns are computed and stated in U.S. Dollars. All returns reflect the reinvestment of income and other earnings.

9 A complete list of composite descriptions, policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

10 Past performance does not indicate future results.

11. This piece is provided for informational purposes only and should not be construed as a research report, a recommendation or suggestion to engage in or refrain from a particular course of action or to make or hold a particular investment or pursue a particular investment strategy, including whether or not to buy, sell or hold any of the securities mentioned, including any mutual fund managed by Brown Advisory

### Disclosures

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Composite performance is based on the Brown Advisory Small-Cap Growth Composite and was obtained through FactSet®. All information and returns shown are as of 12/31/2018 for each period. Returns greater than one year are annualized. Past performance is not indicative of future results. Representative account characteristics and top 10 holdings were obtained through FactSet. This information is based on a representative Small-Cap Growth account and is provided as supplemental information. Account characteristics exclude cash and cash equivalents; top 10 holdings list includes cash and cash equivalents. FactSet® is a registered trademark of FactSet Research Systems, Inc

Sector diversification, attribution, top and bottom five contributors and portfolio additions and deletions source: FactSet. The portfolio information provided is based on a representative Small-Cap Growth account and is provided as supplemental information. References to specific securities are for illustrative purposes only and do not represent all of the securities purchased, sold or recommended for advisory clients. The security returns listed represent the period of when the security was held during the quarter. Top five and bottom five contributors exclude cash and cash equivalents. Sector diversification and attribution excludes cash and cash equivalents. Total portfolio return figures provided above reflect the sum of the returns of the equity holdings in the representative account portfolio due to price movements and dividend payments or other sources of income, and exclude cash. Performance figures may vary from actual portfolio performance, as calculations are based on end-of-day security prices and do not incorporate the actual cost basis or sale price of individual securities. Sectors are based on the Russell Global Classification System and the Global Industry Classification Standard (GICS®) classification system. GICS® is a registered trademark of MSCI and Standard & Poor's Financial Services LLC. The individual amounts shown for top ten holdings, sector diversification and quarterly attribution may not sum to the total amount shown due to rounding.

Please see composite disclosure statements above for additional information

#### **Terms and Definitions for Representative Account Calculations**

Price-Earnings Ratio (P/E Ratio) is the ratio of the share of a company's stock compared to its per-share earnings. P/E calculations presented use FY2 earnings estimates; FY1 estimates refer to the next unreported fiscal year, and FY2 estimates refer to the fiscal year following FY1. Earnings Growth 3-5 Year Estimate is the average predicted annual earnings growth over the next three to five years based on estimates provided to Factset by various outside brokerage firms, calculated according to each broker's methodology. Market Capitalization refers to the aggregate value of a company's publicly traded stock. Statistics are calculated as follows: Weighted Average: the average of each holding's market cap, weighted by its relative position size in the portfolio (in such a weighting scheme, larger positions have a greater influence on the calculation); Weighted Median: the value at which half the portfolio's market capitalization weight falls above and half falls below. Portfolio Turnover (3 yr. avg.) is the ratio of the lesser of the portfolio's aggregate purchases or sales during a given period, divided by the average value of the portfolio during that period, calculated on a monthly basis. The Average Weight of a position or sector refers to the daily average for the period covered in this report of a stock's value as a percentage of the portfolio. The Total Return of an equity security is the sum of the return from price movement and the return due to dividend payments or other sources of income. The portfolio and benchmark returns provided reflect the sum of the returns o equity holdings in the portfolio and the benchmark, respectively. The returns exclude cash. All of the above ratios for a portfolio are expressed as a weighted average of the relevant ratios of each portfolio holding, EXCEPT for P/E ratios, which are expressed as a weighted harmonic average. Allocation Effect: Measures the impact of the decision to allocate assets differently than those in the benchmark. Selection and Interaction Effect: Reflects the combination of selection effect and interaction effect. Selection effect measures the effect of choosing securities that may or may not outperform those of the benchmark. Interaction effect measures the effect of allocation and selection decisions, i.e. did we overweight the sectors in which we underperformed. **Total Effect** reflects the combination of Allocation, Selection and Interaction effects. **Contribution To Return** is calculated by multiplying a security's beginning weight as a percentage of a portfolio by that security's return for the period covered in the report. Totals may not equal due to rounding.